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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,475	02/06/2002	Roger A. Stern	16904-753	3000

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EXAMINER

PEFFLEY, MICHAEL F

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,475

Applicant(s)

STERN ET AL.

Examiner

Michael Peffley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18, 20-28, 30-58, 60-67 and 69-102 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17, 18, 20-24, 28 and 48-55 is/are allowed.
- 6) ☒ Claim(s) 1-16, 25, 30-47, 56-58, 60-67, 69-75, 78-80 and 84-102 is/are rejected.
- 7) ☒ Claim(s) 26, 27, 76, 77 and 81-83 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date Z.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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Applicant's amendments and comments, received December 17, 2003, have been fully considered by the examiner. It is noted that claims previously indicated as containing allowable subject matter are now subject to rejections based on newly found prior art. The following is a non-final Office action and is fully responsive to the communication of December 17, 2003.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 13, 34, 56, 57 and 62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 5, 34 and 62 lack proper antecedent basis for "the electrode assembly". Applicant's arguments filed December 17, 2003 indicate that these claims have been amended, but there is no amendment made to the claims to address this issue.

Claim 13 lacks proper antecedent basis for "the RF electrode", particularly in view of the amendments to the claim.

Claims 56 and 57 are redundant of claim 30 (i.e. they recite limitations added by amendment to claim 30). These claims fail to further limit the subject matter

Claim Rejections - 35 USC § 102

Claims 1-4, 6-10, 14, 15 and 85-91 are rejected under 35 U.S.C. 102(b) as being anticipated by Eggers ('314).

Eggers provides a device which comprises a handpiece (13) having an insert (11) detachably coupled to the handpiece. The insert includes an RF electrode (12) which is comprised of a dielectric portion and conductive portions (Figure 3A-4B). Eggers et al also disclose providing a cooling fluid from the handpiece through the insert and to the electrode. A valve (17) is located in the handle assembly. The examiner maintains that the fluid delivery system is capable (i.e. "configured to") deliver a controllable amount of fluid in pulses through operation of the valve. It is noted that the distal exit of the insert may be interpreted to be both a nozzle for the fluid delivery and a vent. Eggers further teach the use of a dielectric coating on the electrode to provide a "non-stick" coating property for the portion of the electrode contacting tissue (see col. 7, lines 13-30).

Claim 102 is rejected under 35 U.S.C. 102(b) as being anticipated by Pomeranz et al ('579).

The Pomeranz et al device comprises a housing (357). The housing includes a plurality of RF electrodes arranged on a flex-circuit (col. 19, lines 10-17), the flex circuit includes a dielectric portion with a plurality of leads or traces. The electrodes inherently include a front side and a back side.

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Claims 11-13 are rejected under 35 U.S.C. 102(b) as being unpatentable over Ingle et al ('749).

Ingle et al disclose a device which includes a handpiece assembly (46 – Figure 5) with an insert (42) detachably coupled to the handpiece housing. The insert includes an RF electrode (12) which includes a conductive portion (12a, 12b, 12c) and a dielectric portion (i.e. support member). There is also a fluid delivery member (52) for delivery of fluid to the backside of the electrodes (col. 10, lines 14-22).

Claim Rejections - 35 USC § 103

Claims 16, 45, 73 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers ('314) in view of the teaching of Negus et al ('848).

As addressed previously, Eggers provides a device comprising a handpiece and a detachable insert coupled to the handpiece. There is a valve means (17) located on the handpiece for controlling the flow of fluid through the handpiece and the insert and to the electrode. Eggers discloses a simple push valve, and fails to specifically disclose a solenoid valve. The examiner maintains that the use of solenoids as valves is generally well known and would be an obvious substitution for the Eggers push valve to serve the same purpose.

With specific regard to claim 92, Eggers fails to disclose the use of a force sensor to determine the amount of pressure being exerted by the probe. Negus et al disclose an electrosurgical probe which may include a pressure sensor (col. 2, lines 46-57) for sensing the force with which the probe contacts tissue

To have used any well known type of valve (e.g. solenoid valve) to control the flow of fluid in the Eggers device would have been an obvious modification for one of ordinary skill in the art at the time of the invention. Additionally, to have provided the Eggers device with a force sensor to monitor the pressure the probe exerts on tissue would have been an obvious consideration for one of ordinary skill in the art in view of the teaching of Negus et al.

Claims 25, 85-91 and 93-100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pomeranz et al ('579) in view of the teaching of Fan ('402).

As addressed in the previous Office action, Pomeranz et al disclose a device comprising a handpiece and a detachable insert coupled to the handpiece having a flex circuit for an electrode. Pomeranz et al also teach that a fluid may be provided through the insert to the electrodes (col. 12, lines 57-67). While the Pomeranz et al flex circuit includes a dielectric and electrodes, there is no teaching of a dielectric material which is located between the conductive portion and the skin portion when the conductive portion is placed against tissue.

Fan teaches that it is generally well known in the art to provide RF electrodes with a thin coating of a dielectric material (e.g. TEFLON) to prevent the sticking of tissue to the electrode (col. 5, lines 8-20).

To have provided the Pomeranz et al electrodes with a TEFLON coating to prevent tissue from sticking to the electrodes during treatment would have been an obvious modification for one of ordinary skill in the art in view of the teaching of Fan

Claims 30-33, 35-45, 56-58, 60, 61, 63-67, 69-73 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ingle et al ('749) in view of the teachings of Pomeranz et al ('579) and Fan ('402).

The Ingle et al device has been addressed previously. Ingle et al provide a handpiece assembly with an insert detachably coupled to the handpiece assembly. An RF electrode is coupled to the insert and there is a cooling fluid means for cooling the back surface of the electrode. Ingle et al fail to teach the use of a "flex circuit" for the electrodes, and the use of a dielectric coating on the electrodes.

Pomeranz et al, as addressed previously, teach that it is known to provide RF electrodes on a probe in a variety of ways, including on a flexible circuit. Further, Fan teaches that it is generally known in the art to coat RF electrodes with a dielectric (i.e. non-stick) coating to prevent tissue from adhering to the electrodes during treatment.

To have provided the Ingle et al device with electrodes formed from a flex circuit as an alternative design choice to the deposited electrodes would have been an obvious consideration for one of ordinary skill in the art in view of the teaching of Pomeranz et al. To have further provided the electrodes with a dielectric coating to prevent tissue from adhering to the electrodes during use would have been an obvious modification for one of ordinary skill in the art in view of the teaching of Fan.

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Claims 46, 47, 74, 75 and 78-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ingle et al ('749), Pomeranz et al ('579) and Fan ('402) as applied to the claims immediately above, and further in view of the teaching of Negus et al.

Negus et al, as addressed previously, teach that it is known to provide an RF probe with a force sensor to monitor the pressure at which the probe contacts tissue.

To have provided the Ingle et al device, as modified by the teachings of Pomeranz et al and Fan, with a force sensor to monitor the pressure at which the probe is provided against tissue would have been an obvious modification for one of ordinary skill in the art in view of the teaching of Negus et al ('848).

Allowable Subject Matter

Claims 17, 18, 20-24, 28 and 48-55 are allowable over the prior art of record.

Claims 26, 27, 76, 77 and 81-83 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 5, 34 and 62 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sandock ('573) show an endoscopic probe much like Ingle et al which includes a detachment means for detachably connecting an insert portion (114) which includes an electrode to a handpiece housing (10)

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Peffley whose telephone number is (703) 308-4305. The examiner can normally be reached on Mon-Fri from 6am-3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (703) 308-0994. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Michael Peffley
Primary Examiner
Art Unit 3739